Organism: Yersinia *enterocolitica*      
**Target (protein/gene name):** protein-tyrosine-phosphatase

>filtered DNA sequence consisting of 798 bases.

TACTTCCAATCCATGACCACCTCTGCACTCTCTCACCCATCTCTGCTCCCGCTGGACGGTGGTATCAACTTC

CGTGATCTGGGTGGTAACGTTGTTGCGGACGGTCGTCGTATTAAACGTGGTCTGCTGTTC

CGCAGCGGTAGCCTGGACCGTCTGTCTACCAAAGACTGCGCTGTTCTCTCTAGCGGTTCT

GTTGCGCAGATCCTGGACTACCGTGACGCGGACGAAGTTCAGGCGAAACCGGACATCGTT

TGGCAGGGTGCGTCTTACCACAACATCCCGGCGAACCCGCCGTCTTCTGAAGTTAACGCG

AACCTGGAAAAACTCACCAACGAAACTCTGGCCACCTTCGACGCTCGTGCGTTCATGCTG

GAACTGTACCGTCGTCTGCCGTTCAACAACCAGGCGTACAAACAGCTGGTTTCTCTCCTG

CAGAACTCTGCGTCTCCGGAACACGCGGCTGCGGGTGTTGTTCAGCACTGCGCGGTTGGT

AAAGACCGTACCGGTGTTGGTTCTGCGCTCGTCCTGTTTGCCCTCGGTGCCGACGAATCT

ACCGTTCTGGAAGACTACCTGCTGACTGAGACCACCCTGGCGCCTTTTCGTGAGCACATG

CTCGCTGAACTGGCTCTGAAACTGAACTCTCAGGCGCTGGGTCAGTTCGCCTTCGTTCTG

TCTGCGCGTGAAGAATTCATCCAAACGGCCCTGCGTTGCATCCAGGAACGCTACGGTTCT

AGCGAACAGTGGCTGCAACAGGAATTCGGTCTGGGTCGTATCGAACGTGAAAAGCTCCAA

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TATCCACCTTTACTGTTATTCGAGGAAATAAGA

TCTTATTTCCTCGAATAACAGTAAAGGTGGATA

[SEQUENCE:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#Sequence)5'- TAC TTC CAA TCC ATG ACC ACC TCT GCA CTC TCT CAC CCA TCT CTG CTC CCG CTG GAC GGT GGT ATC AAC TTC CGT GAT CTG GGT GGT AAC GTT GTT GCG GAC GGT CGT CGT ATT AAA CGT GGT CTG CTG TTC CGC AGC GGT AGC CTG GAC CGT CTG TCT ACC AAA GAC TGC GCT GTT CTC TCT AGC GGT TCT GTT GCG CAG ATC CTG GAC TAC CGT GAC GCG GAC GAA GTT CAG GCG AAA CCG GAC ATC GTT -3'[COMPLEMENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#Complement)5'- AAC GAT GTC CGG TTT CGC CTG AAC TTC GTC CGC GTC ACG GTA GTC CAG GAT CTG CGC AAC AGA ACC GCT AGA GAG AAC AGC GCA GTC TTT GGT AGA CAG ACG GTC CAG GCT ACC GCT GCG GAA CAG CAG ACC ACG TTT AAT ACG ACG ACC GTC CGC AAC AAC GTT ACC ACC CAG ATC ACG GAA GTT GAT ACC ACC GTC CAG CGG GAG CAG AGA TGG GTG AGA GAG TGC AGA GGT GGT CAT GGA TTG GAA GTA -3'

[GC CONTENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#GCContent)56.0 %

[MELT TEMP:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#MeltTemp)66.2 ºC

<Forward Primer>

[SEQUENCE:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#Sequence)5'- TAC TTC CAA TCC ATG ACC ACC TCT GCA CTC TCT C -3'

[COMPLEMENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#Complement)5'- GAG AGA GTG CAG AGG TGG TCA TGG ATT GGA AGT A -3'

At 0mM Mg++

[GC CONTENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#GCContent)50.0 %

[MELT TEMP:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#MeltTemp)64.7 ºC

At 1.5mM Mg++

[GC CONTENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#GCContent)50.0 %

[MELT TEMP:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#MeltTemp)71.6 ºC

At 2.0mM Mg++

[GC CONTENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#GCContent)50.0 %

[MELT TEMP:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#MeltTemp)72.0 ºC

At 4.0mM Mg++

[GC CONTENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#GCContent)50.0 %

[MELT TEMP:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#MeltTemp)72.9 ºC

At 6.0mM Mg++

[GC CONTENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#GCContent)50.0 %  
[MELT TEMP:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#MeltTemp)73.3 ºC

<Reverse Primer> TCTTATTTCCTCGAATAA

<Reverse complement primer>: TTATTCGAGGAAATAAGA

[SEQUENCE:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#Sequence)5'- TAT CCA CCT TTA CTG TTA TTC GAG GAA ATA AGA -3'

[COMPLEMENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#Complement)5'- TCT TAT TTC CTC GAA TAA CAG TAA AGG TGG ATA -3'

At 0mM Mg++

[GC CONTENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#GCContent)33.3 %

[MELT TEMP:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#MeltTemp)57.6 ºC

At 1.5mM Mg++

[GC CONTENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#GCContent)33.3 %

[MELT TEMP:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#MeltTemp)65.6 ºC

At 2.0mM Mg++

[GC CONTENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#GCContent)33.3 %

[MELT TEMP:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#MeltTemp)66.2 ºC

At 4.0mM Mg++

[GC CONTENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#GCContent)33.3 %

[MELT TEMP:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#MeltTemp)67.3 ºC

At 6.0mM Mg++

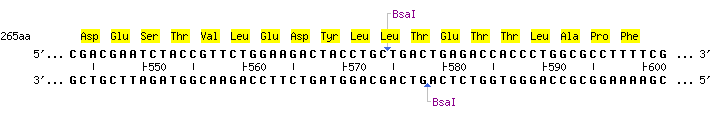
[GC CONTENT:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#GCContent)33.3 %

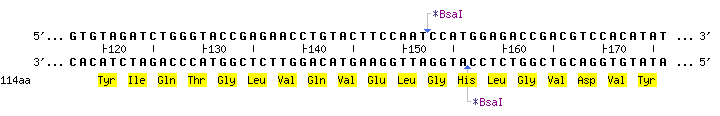
[MELT TEMP:](http://www.idtdna.com/analyzer/applications/Instructions/Default.aspx?AnalyzerDefinitions=true#MeltTemp)67.8 ºC

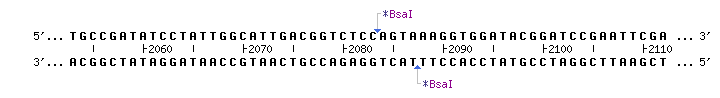
**<Final Result>**

>gi|124015065|gb|EF198106.1| Expression vector pNIC28-Bsa4, complete sequence

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